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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12N 15/87, C07K 19/00	A1	(11) International Publication Number: WO 00/15824 (43) International Publication Date: 23 March 2000 (23.03.00)
(21) International Application Number: PCT/SE99/00398 (22) International Filing Date: 15 March 1999 (15.03.99) (30) Priority Data: 9803099-2 13 September 1998 (13.09.98) SE (71) Applicant (for all designated States except US): KAROLIN- SKA INNOVATIONS AB [SE/SE]; S-171 77 Stockholm (SE). (72) Inventors; and (75) Inventors/Applicants (for US only): BRANDÉN, Lars [SE/SE]; Ringvägen 135, S-116 61 Stockholm (SE). MOHAMED, Abdulla. J. [SE/SE]; Saimagatan 13, 1 tr, S-164 75 Kista (SE). SMITH, C., I., Edvard [SE/SE]; Naumansvägen 23, S-129 38 Hägersten (SE). (74) Agents: BERG, S., A. et al.; Albilms Patentbyrå Stockholm AB, P.O. Box 5581, S-114 85 Stockholm (SE).	(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>	
(54) Title: <u>TRANSFER METHOD FOR SPECIFIC CELLULAR LOCALISATION OF NUCLEIC ACIDS</u>		
(57) Abstract <p>The present invention relates to a novel method of genetic modification, wherein a nucleic acid of interest is transferred across a biological membrane, and/or directed to a specific location within or on a cell, by use of a synthetic transport entity. The transport entity according to the invention is new as such and produced by coupling a functional element (FE), such as a nuclear localization signal (NLS), an antennapedia peptide of a protein comprising both membrane translocation and nuclear transport properties, to a binding element (BE), such as a peptide nucleic acid (PNA), preferably separated by a linker molecule, which combination is then hybridised to a BE target sequence present on a carrier, which also includes the nucleic acid of interest. The present nucleic acid of interest may for example be a gene encoding a peptide, a protein or an RNA, or any other nucleic acid useful in genetic recombination events.</p>		

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